



# LDM Receiver

University of the Basque Country

Mobile and Legacy (High capacity system) Multilayer Reception

CloudTxn compatible for the Mobile Layer

DVB-T2 // T2-Lite compatible for the Legacy Layer

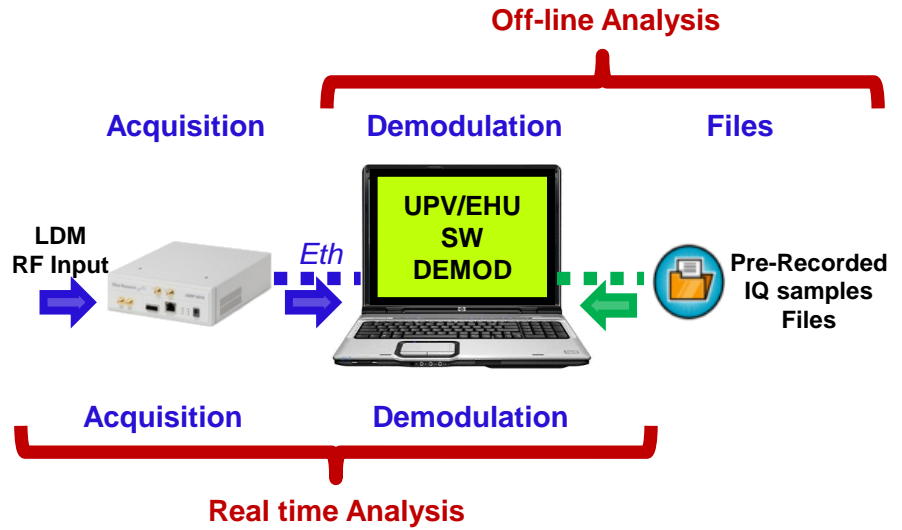
Spectrum and Impulse Response Displays

Channel Estimation Display and Equalization Information

P1 Symbol Detection Display and Synchronization Information

Signalling Information

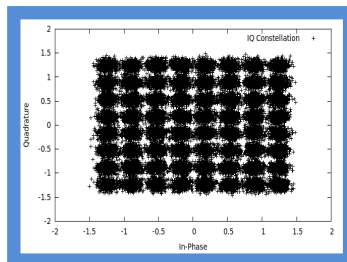
Received Signal Quality Information



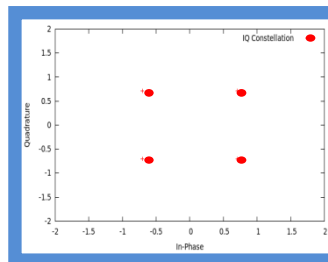
University of the Basque Country (EHU) LDM Receiver

<b>Synchronism:</b>		<b>Upper Layer (Mobile):</b>	
Status	Synced	Mode	QPSK, 1/4
P1 Freq. Shift	2.7 Hz	Int. Length	78.14ms
Norm Freq. Shift	0.069 Hz	WMER (dB)	4.87
CPE	-1.6	MER (dB)	4.87
Clock Error	-0.014 ppm	PreLDPC BER	1.26e-03
Detected Gi	1/8	PreBCH BER	0.00e+00
		LDPC FER	0.00e+00
		BCH FER	0.00e+00
		LDPC iterations	2
		Bitrate (TS)	2.11 Mbps
<b>Equalizer (Lin/Ideal):</b>		<b>Lower Layer (Legacy):</b>	
Window Pos	21 m	Mode	16QAM, 2/3
Time Filter Size	43 m	Int. Length	78.14ms
D. Spread/Ripple	0.039 us / 0.087 dB	WMER (dB)	15.40
		MER (dB)	15.41
		PreLDPC BER	3.16e-03
		PreBCH BER	0.00e+00
		LDPC FER	0.00e+00
		BCH FER	0.00e+00
		LDPC iterations	2
		Bitrate (TS)	11.36 Mbps
<b>Signalling: (LI-PS)</b>			
S1/S2/Pre/Post	OKOKOKOK		
S1/S2 prob	100% / 100%		
FFT Size	16k		
Mode	Siso		
PilotPatern	PP2		
FrameLength	83.63ms		
<b>Signal Properties:</b>			
CN (dB)	20.31		
Power (dBm)	-55.66		
Injection (dB)	-5		

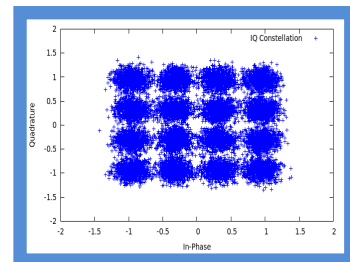
LDM Constellation



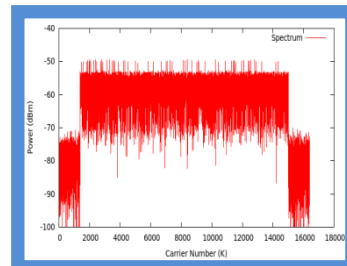
Mobile Constellation



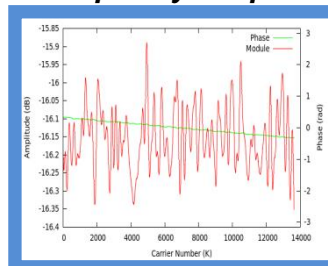
Legacy Constellation



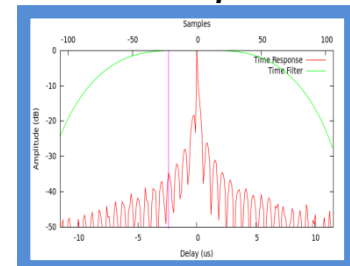
Signal Spectrum



Frequency Response



Time Response



For more information:

Signal Processing and Radiocommunication Research Group (TSR) ([www.ehu.es/tsr\\_radio](http://www.ehu.es/tsr_radio))  
 University of the Basque Country (UPV/EHU) Alameda Urquijo s/n 48013 Bilbao (SPAIN)